

IN THE U.S. PATENT AND TRADEMARK OFFICE

In re application of

Rainer OBWEGER et al.

Conf. 8998

Application No. 10/560,812

Group 1792

Filed December 15, 2005

Examiner Naomi Birbach

DEVICE AND METHOD FOR WET TREATING DISC-LIKE SUBSTRATES

PRE-APPEAL BRIEF REQUEST FOR REVIEW

Assistant Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

May 10, 2010

Sir:

Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request.

A Notice of Appeal is filed herewith.

The review is requested for the reasons advanced on the attached sheets.

Respectfully submitted,

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REASONS IN SUPPORT OF REQUEST FOR REVIEW

Claims 1, 2, 4-18, 20-25, 27-35 and 37 are pending in the application. Claims 18, 20, 21, 32-35 and 37 have been withdrawn. Claims 1, 2 4-17, 22-25 and 27-31 stand rejected. The Amendment of April 8, 2010 was not entered per the Advisory Action of April 21, 2010. The claims at issue are thus those set forth in the Amendment of April 22, 2009.

Claim 1 of the present invention thus sets forth:

1. *A device for wet treatment of wafers, comprising:
a first plate;*

a second plate substantially parallel to said first plate;

holding means for holding a wafer between said first and said second plate substantially parallel to said plates;

first dispensing means for introducing fluid into a first gap between said first plate and a wafer when being treated;

second dispensing means for introducing fluid into a second gap between said second plate and a wafer when being treated;

at least one vibrating element acoustically coupled to at least said second plate; and

rotating means for rotating said holding means and said second plate relative to each other about an axis substantially perpendicular to said second plate.

Claim 6 has been rejected for indefiniteness as negating the last subparagraph of claim 1. Claim 6 sets forth "wherein said second plate of itself is not rotatable."

However, it is absolutely clear that if two objects rotate relative to each other they have three options:

A: the first object (holding means) rotates and the second object (here the second plate) rotates in different speeds and/or in different directions.

B: the first object rotates and the second object does not rotate.

C: the first object does not rotate and the second object rotates.

As should be clear from the specification, option B is the preferred one, where the holding means and the first plate are coupled to each other.

There is thus no negation of claim 1 by claim 6.

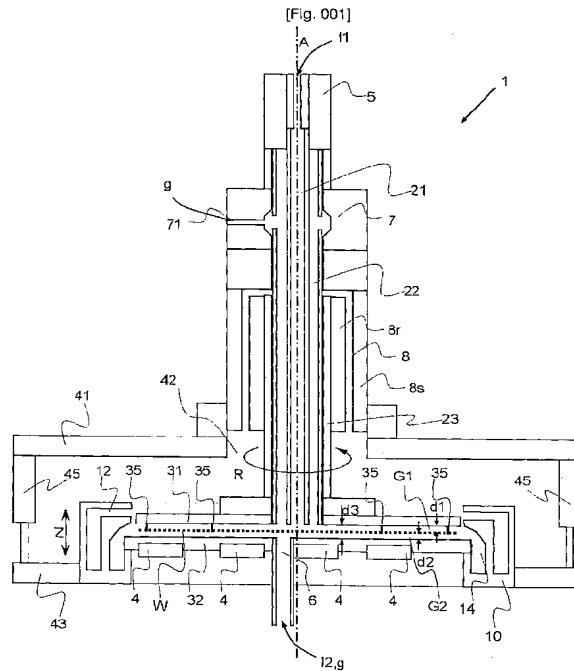
Moreover, there is no change of scope on this point in the proposed amendments to claim 1 set forth in the Amendment (unentered) of April 9, 2010, which set forth: *"rotating means for rotating said holding means wherein the holding means and the first plate are coupled to each other to form a holding unit, the second plate is not rotatable, a liquid collector is circumferentially surrounding said holding means for collecting liquid that flows off a wafer during being treated with liquid, and said second plate is sealed against said liquid collector."*

The indefiniteness rejection under 35 USC §112, second paragraph should accordingly be withdrawn.

The claims have also been rejected under 35 USC §103(a) as being unpatentable over at least the references of U.S. Patent

6,632,292 ("AEGERTER") in view of U.S. Publication 2002/0050244 ("ENGESSER") and U.S. Publication 2002/0162570 ("CAVAZZA").

The wet treatment device of the present invention can be represented by Figure 1, which is reproduced below.



The present invention includes a first plate and a substantially parallel second plate, and a wafer is held between the first and the second plate. During treatment a first dispenser introduces fluid into a first gap between the first plate and the wafer, and a second dispenser introduces fluid into a second gap between the second plate and the wafer. At least one vibrating element is acoustically coupled to at least the second plate, and a holder and the second plate are rotated relative to each other (the meaning of which has been discussed above) about an axis substantially perpendicular to the second plate.

AEGERTER pertains to wafer treatment. Figure 4 of AEGERTER is reproduced below.

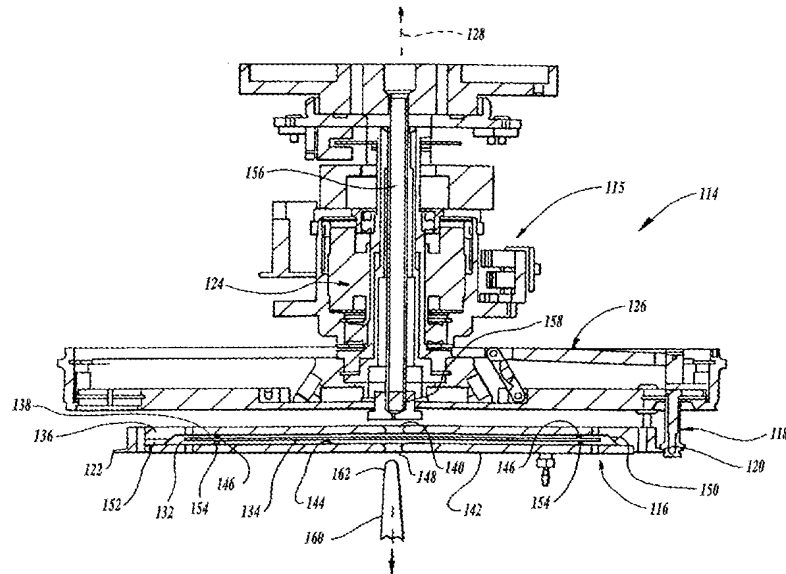


Fig.4

The device of AEGERTER includes a substantially parallel first plate and second plate, and holding means for holding a wafer between the first and said second plates. During treatment a first dispenser introduces fluid into a first gap between the first plate and a wafer, and a second dispenser introduces fluid into a second gap between the second plate and the wafer.

However, AEGERTER does not disclose at least one vibrating element acoustically coupled to at least the second plate, and rotating means for rotating the holding means and the second plate relative to each other about an axis substantially perpendicular to said second plate.

Paragraph 9 of the Official Action of January 8, 2010 asserts: "Aegarter discloses rotating means in the form of a rotor (Ref. #115) and rotor motor assembly (Ref. #124), in

*accordance with applicant's specification, for rotating the work piece housing, which includes the wafer and second plate, **relative to each other** about an axis substantially perpendicular to the second plate (Col. 9, lines 62-Col. 10, line 14; Figure 4)"* (emphasis added).

This assertion totally neglects the fact that AEGERTER not at all discloses any rotation of wafer and second plate relative to each other (neither does the wafer rotate against the second plate nor does the second plate rotate against the wafer). The Office Action states that the housing rotates namely "...work piece housing, which includes the wafer and second plate ...". So the Office understood that the wafer rotates together with the second plate. Therefore, it is not understood why the Office still could make such a misinterpretation that the wafer rotates and the second plate rotate relative to each other.

The Official Action also tries to differentiate between the phrase "*relative against each other*" and "*relative to each other*". However, it should be noted that the terms "*relative to each other*" and "*relative against each other*" basically have the same meaning, which is that these two plates separately move no matter whether they move in the same directions at different speeds or even in different directions.

The other applied art do not address at least the deficiencies of AEGERTER discussed above.

The unpatentability rejections based on AEGERTER should accordingly be withdrawn.